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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,776

04/06/2006

Sai Kodama

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09/23/2008

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

BAUMSTEIN, KYLE

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

09/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,776	Applicant(s) KODAMA ET AL.	
	Examiner KYLE BAUMSTEIN	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 7 and 8 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☒ Claim(s) 3-6, 9 and 10 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/6/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1, 2, 7, and 8, drawn to the polyether compound of claim 1, the hydroxyl terminated composition of claim 2 and the use of the composition of claim 1 as a softening agent for poly (lactic acid).

Group II, claim(s) 3, 4, and 9, drawn to the polyurethane composition of claim 3 and the process of using said composition as a softening agent for thermoplastic resins.

Group III, claim(s) 5, 6, and 10, drawn to the polyester composition of claim 5 and the process of using said composition as a softening agent for thermoplastic resins.

The inventions listed as Groups I, II, and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The three groups are drawn toward three different compounds. A priori lack of unity exists due to the differing nature of each of the compositions.

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

high-density polyethylene and polypropylene, polystyrene, acrylonitrile-polystyrene resin, acrylonitrile-butadiene-styrene resin, poly(methyl acrylate),

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poly(ethylene terephthalate), poly(butylene terephthalate), poly(lactic acid), polycarbonate resin, polyamide resin, and polyester resin.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

The invented composition is claimed to comprise a polymer having the structural unit represented by Formula (I) and a thermoplastic resin. The species listed above are given as suitable thermoplastic resins to be used in said composition.

The following claim(s) are generic: 1-6 and 8-10.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: the thermoplastic resins to be used in the invented composition are all distinct from one another.

During a telephone conversation with Lawrence Perry on September 9, 2008 a provisional election was made without traverse to prosecute the invention of Group I, claims 1, 2, 7, and 8; as well as the poly(lactic acid) thermoplastic resin. Affirmation of

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this election must be made by applicant in replying to this Office action. Claims 3-6, 9 and 10 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

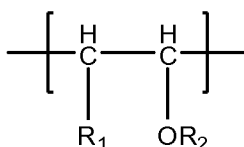
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 7, and 8 are rejected under 35 U.S.C. 102(a) as being anticipated by Inayama et al. (US PGPub. 2003/0119959).

Inayama teaches a softening agent for thermoplastic resins comprising polyvinyl ether. The polyvinyl ether of the invented composition is not limited other than the presence of a structural unit represented by the general formula:



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wherein R_1 is a hydrogen atom or lower alkyl and R_2 is substituted or unsubstituted lower alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or substituted or unsubstituted aralkyl (§ 0009-0010). This polyvinyl ether structure is the same as is claimed in the instant application. The reference states that the invented composition is used to soften various thermoplastic resins. Among the examples of thermoplastic resins suitable to be used with the softening agent, polylactic acid is disclosed as preferable (§ 0036-0037). Furthermore, Inayama discloses that the method of using the softening agent is not particularly limited and either the softening agent can be added to the resin or vice versa prior to kneading and heating (§ 0048). Therefore, the softening agent and use thereof as disclosed in Inayama is anticipatory of the composition and use as claimed in the instant application.

Allowable Subject Matter

Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art clearly teaches the use of polyvinyl ether compounds as softening agents for a variety of thermoplastic resins. However, the use of a hydroxy-terminated or functionalized polyvinyl ether is not mentioned.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KYLE BAUMSTEIN whose telephone number is (571)270-5467. The examiner can normally be reached on First Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KBB/

/Randy Gulakowski/
Supervisory Patent Examiner, Art Unit 1796